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Virginia Sierra Club Comments on Virginia's Watershed Implementation Plan and the Draft Total Maximum Daily Load (TMDL)

The Chesapeake Bay TMDL represents a historic opportunity for the federal government, Washington DC and the states throughout the watershed to come together and finally reduce pollution entering the bay to levels that will restore plant and animal life, strengthen our economy and restore our natural environment.

The TMDL is supposed to be a partnership between the states and federal government. An element of this partnership is the responsibility of each of the Bay jurisdictions to develop a Watershed Implementation Plan. These plans are supposed to be a roadmap to clean water, outlining the steps that the state will take to have in place all cleanup activities by 2025. Unfortunately, Virginia's draft Watershed Implementation Plan is not a roadmap. Instead, the state has submitted a document that outlines where we are at in our cleanup efforts and where we want to go, but no direction on how to get there.

The remainder of this document provides background on the Chesapeake Bay's pollution problems, outlines the weaknesses the Virginia Chapter-Sierra Club has identified in the draft WIP, our recommendations for strengthening Virginia's strategy and our view on the Environmental Protection Agency's backstop plan for meeting water quality standards.

Chesapeake Bay: Too Dirty for too Long

The Chesapeake Bay is one of America's great natural places. It is the largest estuary in the country, and one of the most productive in the world. It is home to thousands of species of plants and animals, and 15 million Americans live along the watershed's shores.

Unfortunately, the bay is also one of the world's most fragile ecosystems, and for decades it's been in poor condition. Each year, nearly 300 million pounds of nitrogen pollution end up in the Chesapeake Bay. This pollution comes from run-off from agricultural facilities, poor

stormwater management from developments and urban areas, and outdated sewage treatment plants.

For more than 25 years, the federal government and the states that are part of the Chesapeake Bay watershed have been working together to address the pollution entering the bay. They have largely relied on voluntary measures to reduce the pollution loads entering the bay, and time and time again this approach has led to missed deadlines and a lack of substantial progress in restoring this treasured waterway.

Now, with the leadership of the Obama administration's Environmental Protection Agency we have the opportunity to correct course on bay cleanup, but Governor Bob McDonnell and his allies in the agriculture and development business sectors are calling for more of the same failed policies that created the problems facing the bay.

Despite successes in certain parts of the ecosystem and specific geographic areas, the overall health of the Chesapeake Bay remains dangerously degraded. The bay continues to have poor water quality, degraded habitats and low populations of many species of fish and shellfish. Based on these three areas the health of the bay was rated as 38 percent in 2008, out of a total possible of 100 points.

The Bay and its tidal tributaries are overwhelmed with nutrients (nitrogen and phosphorus) and sediment. The excess nutrients fuel harmful algal blooms that rob the water of oxygen while sediment block sunlight from reaching underwater bay grasses, all of which creates a dead zone that many summers takes up one-third of the Chesapeake Bay. The main sources of nitrogen, phosphorus and sediment are agriculture, urban and suburban runoff, wastewater, and airborne contaminants. Agriculture is the largest source of nutrient and sediment pollution in the watershed.

The solution to finally restoring the Chesapeake Bay is to enact enforceable pollution limits for all sources of pollution. For too long, corporate agribusiness, developers and municipalities have been allowed to not meet pollution reduction targets with no consequences. We need to reverse this course and ensure that the state enforces pollution reduction measures and that polluters and the state are held accountable if goals are not met.

Weaknesses within the Virginia WIP

To begin, it is important to note that we believe in the need for a plan that is crafted by Virginia in order to have confidence that the plan will be successfully carried out. Unfortunately, we cannot turn a blind eye to the fact that the Virginia plan is far too weak to be a stand-alone document. Specifically, we have identified deficiencies in each of the pollution sectors that we believe need to be addressed.

Two-year Benchmarks

It is disconcerting that Virginia has chosen to view the draft WIP in the totality of the next 15 years rather than the two-year benchmarks that have been agreed upon by the partner states within the watershed, the District of Columbia and the federal government. These two-year milestones provide a mechanism for Virginia to review its progress on meeting the pollution reduction targets. Virginia needs to use this tool to provide transparency and a system of checks on our progress.

Nutrient Credit Trading Program

The foremost glaring concern when reading the Virginia WIP is the Commonwealth's over reliance on an expansion of the nutrient credit trading program. From our analysis of the state's strategy it would appear that the state believes massive pollution reductions can be made through this program, however, there are multiple problems with this strategy which the state has not addressed.

- The state has not identified a legislative proposal for what form the expanded nutrient credit program should take on. We feel that the current proposal to conduct a study on the feasibility of expanding the existing program, paired with no criteria of what that expanded program will look like is a recipe for delay and inaction. It is up to the McDonnell administration and the state regulatory agencies to provide detailed recommendations and guidance what Virginia's expanded trading regime will look like. This guidance is currently lacking in the WIP.
- Nutrient trading should not be expanded. Developing a program to do so will delay the implementation of proven methods to cut pollution. An expanded nutrient trading program would be confusing to polluters and expensive and cumbersome to administer. Local officials already complain of confusion in regulations, and cutbacks in staffing at Virginia's natural resources agencies make it unlikely that useful rules can be developed, reviewed, and implemented efficiently.
- As currently described, there are no regulatory drivers to ensure that pollution credits will be purchased from the various sectors. Furthermore, there is no timeline for when we can expect to see this program take effect and on what schedule different sectors will begin to participate.

- As with many other areas within the WIP, this section lacks specificity. We do not know to what level different sectors and communities will be expected to participate in the program, nor how they will go about participating.

James River Strategy

The Virginia Chapter-Sierra Club begins with the premise that all of Virginia's rivers, lakes and streams should be clean and safe for the plants and species that call it home, and for the citizens who rely on them for drinking water and recreation. The Virginia WIP, and the McDonnell Administration, has asserted that the James River could become too clean. This is an affront to the principle of people deserving access to clean water, and could be considered a violation of Article XI of the Virginia Constitution.

Our recommendation to the EPA is to reject Virginia's assertion that we not adopt the allocation put forward by the EPA for nitrogen and phosphorus limits on the James river. Virginia must begin taking the steps to meet EPA's draft allocation.

We propose that the Virginia WIP be amended to include the following action:

- Requiring wastewater treatment plants to reduce their total nitrogen and total phosphorus loads to 4 mg/L and .3 mg/L respectively.

Agriculture

The initial reaction when reading the Watershed Implementation Plan is that Virginia has shown a real commitment to reducing pollution from the agriculture sector in the draft strategy. Upon further review, several problems become apparent with the draft strategy.

- **Voluntary Nature of the Best Management Practices (BMP) Program –** The draft Virginia WIP relies largely on the voluntary implementation of agricultural best management practices with little increase in the transparency or auditing of their implementation. Based upon the Commonwealth's own arguments this is a flawed approach. The administration has claimed that not all BMPs are given credit, yet there is no proposal to ensure better tracking of implementation.
- **Funding for Agriculture BMPs -** The draft strategy assumes tens of millions of additional funding for BMP cost-share programs, but makes no proposals on how to provide increased funding. It is incumbent on Virginia to provide a strategy for meeting the funding required through the ramp-up period. As evidenced by the funding cuts to cost-share programs in the 2010 General Assembly session, it is our recommendation that this funding should come from a dedicated source.

Handling Manure Loads – The state should be commended for referencing the potential for a poultry litter to energy project. We would encourage the state to establish a pilot program with James Madison University or another public educational institution to develop this technology and turn what is currently a financial drain on Virginia's farmers into an economic engine and coup for clean water.

In addition to the recommendations made above the Virginia Chapter believes the following steps should be taken to reduce nutrient loads from the agriculture sector:

- Require that all cows and other livestock are fenced out of Virginia's streams by 2017. No new unfenced pastures should be allowed to go forward beginning January 1, 2011.

- Prohibit additions of manure, phosphorus-containing fertilizer, or sludge to soils with phosphorus saturation greater than 20 percent, or to soils that are highly erodible or otherwise hydrologically unsuitable for land application.

- Nutrient management and soil conservation plans should be in place on all farms over 500 acres by 2014; and on all farms over 250 acres by 2017; and on all farms over 50 acres by 2020; and on all commercial farms by 2025. The Commonwealth should develop and establish a nutrient analysis and fertilizer application education and certification program that should apply to all purchasers of more than 50 pounds of fertilizer.

- All perennial streams should have established at least a 35 foot forested or appropriate vegetative buffer. Farming practices that overwhelm this buffer with sediment or nutrients, so that it can not function as an ecosystem, should be prohibited. This should be a priority use of federal and state conservation funds. These buffers should be on all lands including those later developed.

Stormwater

While Virginia has made significant progress in reducing pollution from agriculture and wastewater facilities the same cannot be said for stormwater. Recent reports show that efforts to clean the Chesapeake Bay and its tributaries are losing ground specifically because increased stormwater pollution is offsetting progress being made from point sources, agriculture and other sources.[1]

[1] http://www.vcnva.org/anx/ass/library/35/stormwaterfacts.pdf

Unfortunately, the Virginia WIP assumes that stormwater reductions will meet the E3 standard (Everything, Everywhere by Everyone) which is simply not possible without significant improvement to Virginia's plan. We believe that the Virginia allocation cannot be met without strengthening the proposed stormwater regulations and adopting them immediately on January 1, 2011.

In addition to the recommendations made above the Virginia Chapter-Sierra Club believes that the following steps should be taken to reduce nutrient loads from stormwater:

- Prohibit new construction in 100 year floodplains or within 100 feet of a perennial stream, or within 25 feet of an intermittent stream.
- Virginia should implement the Department of Conservation and Recreation stormwater program as it stood September 2009, before various changes were made to weaken and delay the program.
- Require that all MS4 and other stormwater permits incorporate the local wasteload allocations as defined in the TMDL.

Wastewater

Virginia has seen significant load reductions from improvements to wastewater treatment plants throughout the Chesapeake Bay watershed. The state should be commended for its progress in this area. It is our belief that this area represents a model for the other sectors since water quality improvement in this area can be traced directly to the mandate that load reductions be achieved from wastewater treatment plants.

Unfortunately, the Virginia WIP does not do enough to capitalize on this proven pollution reduction method. As stated earlier, we believe that Virginia should retrofit treatment plants in the James River Basin to the levels of 4 mg/L total nitrogen and .3 mg/L total phosphorus.

Furthermore, there is concern over the pump-out requirement for onsite septic systems. The plan lacks clarity on how 100% pump-outs will be achieved. We would recommend that the Commonwealth include a plan for accounting for total pump-outs. Specifically, we believe that homeowners should mail back a certificate provided by the contractor to the local municipality so that local governments can track those homes which have met this requirement and those that have not.In addition to the recommendations made above the Virginia Chapter-Sierra Club believes that the following action should be taken to reduce nutrient loads from wastewater and onsite septic systems:

- Ensure adequate ongoing funding to Virginia's Water Quality Improvement Fund to continue the ability of wastewater treatment plants to install best available control technology. Virginia must close the gap for smaller point source dischargers, specifically on wastewater treatment plants (less than 500,000 gallons per day capacity).

Review of EPA Backstop Actions

It is the Virginia Chapter-Sierra Club's sincere hope that the EPA backstop actions not have to be applied to Virginia. We would prefer to see a plan that is developed by Virginia that meets the assigned load allocations and provides reasonable assurance that the actions necessary to achieve those allocations will be enacted.

However, if Virginia fails to amend the draft WIP and provide reasonable assurance than we believe it is the responsibility of the EPA to enact those backstops included in the draft TMDL.